TOTAL DISSOLVED SOLIDS **SM 2540 C - 1997 (2011)**

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 2020.

Facility Name:_____ VELAP ID:_____

Assessor Name:_____ Analyst Name:_____ Inspection Date:_____

Records Examined: SOP Number/ Revision/ Date _____ Analyst:_____

Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____

Relevant Aspect of Standards	Reference	Y	N	N/A	Comments
Method Specific Requirements:					
1. Were glass fiber filter disks without organic binders used for the analysis? *NOTE: Whatman grade 934AH, Gelman type A/E, Millipore type AP40, E-D Scientific Specialties grade 161, Environmental Express Pro Weigh, or other products that give equivalent results.*	2540 C.2.a				
2. Were filters prewashed with 3 successive 20 ml volumes of reagent grade water and the washings discarded?	2540 C.3.a				
3. Was vacuum applied until all traces of water were removed?	2540 C.3.a				
4. Were clean evaporating dishes heated to 180±2° C for 1 hour?	2540 C.3.b				
5. If volatile solids were to be measured, were clean evaporating dishes ignited at 550° C for 1 hour?	2540 C.3.b				
6. Were prepared dishes stored in desiccators and weighed immediately prior to use?	2540 C.3.b				
7. Did the sample volumes used yield 2.5-200 mg dried residue?	2540 C.3.c				
8. If filtration required more then 10 minutes, was a larger filter diameter or a smaller volume used?	2540 C.3.c				
9. After filtration, were samples and apparatus washed with three additional 10 ml volumes of reagent grade water allowing complete drainage between washings?	2540 C.3.d				
10. Was suction continued about 3 minutes after filtration was complete?	2540 C.3.d				
11. Was total filtrate, including final washings, transferred to a weighed evaporating dish and evaporated to dryness on a steam bath or in a drying oven?	2540 C.3.d				
12. Was evaporated sample dried in an oven at least 1 hour at 180 ± 2° C and cooled in a desiccator prior to weighing?	2540 C.3.d				
13. Was the cycle of drying, cooling in a desiccator, and weighing repeated until the difference was less than 0.5 mg or less than 4% of the previous weight?	2540 C.3.d				
14. Were results calculated as follows: $mg\ Total\ Dissolved\ Solids = \frac{[(A-B)\times 1000]}{sample\ volume, mL}$ Where: A = weight of dried residue + dish, mg, and B = weight of dish, mg	2540 C.4				